Exhibit R	-2, RDT&E Budg	get Item 3	<b>ustificat</b>	ion			DATE: Fe	ebruary 200	2
				R-1 ITEM NOMENCLATURE Defense Technical Information Services/PE 0605801K					
COST (in millions)	FY01	FY02	FY03	FY04	FY05	FY06	FY07	Cost to Complete	Total Cost
Total Program Element Cost	44.381	43.738	45.249	46.217	47.511	48.707	50.152	Contg	Contg
001 Defense Technical Information Center	34.549	33.858	34.745	35.530	36.547	37.589	38.775	Contg	Contg
002 Information Analysis Centers	9.832	9.880	10.504	10.687	10.964	11.118	11.377	Contg	Contg

A. Mission Description and Budget Item Justification: The Defense Technical Information Services Program Element provides resources for the Defense Technical Information Center (DTIC) and the DoD Information Analysis Centers (IACs). DTIC's mission and function is to provide for the centralized operation of DoD Services for the acquisition, storage, retrieval, and dissemination of Scientific and Technical Information (STI), including data which is restricted, controlled and/or classified. DTIC also functions as the central activity within the DoD for exploring and applying advanced techniques and technology to DoD STI systems and for developing improvements in service and STI transfer effectiveness. The purpose of the program is to permit timely and effective exchange of information, to improve research, to avoid unnecessary duplication of effort and resources, and to improve decision making. DTIC's concept of operations is to function as the front door to DoD unclassified and unlimited information resources for customers internal and external to DoD; as the door to controlled information resources for internal DoD use; and as a repository and processor for STI and one-stop shopping. The military, universities, managers, scientists, engineers, and contractors look to DTIC to serve as a DoD Information Utility and to provide for leadership in the advancement of information access, sharing and knowledge management. The IACs are contractor-operated research organizations chartered by OSD to collect, analyze, synthesize and disseminate worldwide scientific and technical information in specialized fields to prevent re-inventing research and to promote standardization within these fields. The DTIC IAC Program Management Office provides management and oversight of 13 IACs and funds operations of 12 IACs. DTIC currently serves information from its collection to approximately 5642 registered organizations located in the U.S. and overseas. In addition, DTIC operates 100 websites (e.g. Homepages and associated web pages) for itself and other organizations with an average of 87.000.000 accesses per month in FY 02. The Program Element is under Budget Activity 6, RDT&E Management Support, which provides for the support of operations required for general research and development and not allocable to specific missions.

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Exhibit R-2, RDT&E Budget Item Justifi	cation	DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
RDT&E, Defense-Wide/06	Defense Technical Information	Services/PE 0605801K

#### FY 2001 Accomplishments:

**DTIC:** Funded ongoing basic operations including input and preservation of information (media conversion where needed, to ensure interoperability and creation of metadata), delivery of products and services including web support, personnel, maintenance of equipment, postage and support services paid to other government agencies via Inter-service Support Agreements.

(1 Otr - 4 Otr; \$31.443 Million)

Examples of accomplishments include:

- o Provided substantial scientific and technological information in support of the Defense RDT&E effort by leveraging ongoing and completed research findings. Continued to identify and acquire government information collections for dissemination and preservation through the DTIC technical report collection.
- o Assimilated modernization techniques and equipment to provide state-of-the-art electronic access and dissemination of DTIC products and services. Enhanced the Electronic Document Management System to include the conversion and processing of unclassified technical reports submitted electronically through the web interface.
- o Updated and monitored secure systems. Enhanced efforts to convert the DTIC archive of technical reports to electronic media to preserve critical information and provide a paperless environment.
- o Promoted awareness of DTIC through Distance Learning Courses and increased program development activities.
- o Initiated requirements definition and development of the DTIC Knowledge Portal pilot to support internal DTIC staff requirements to include information, access to support systems, and collaboration.
- o Initiated testing of the Internet-based credit card processing system.
- o Managed and executed the Science & Technology (S&T) Business Process Reengineering initiatives for the Deputy Under Secretary of Defense for Science and Technology (DUSD(S&T)). Electronically collected, validated, and disseminated DoD's FY00 In-House Activities Report. Updated the Research and Development Descriptive Summaries (RDDS) database and website with the latest data. Continued enhancements to the DoD S&T InfoWeb, the S&T Collaboration Tool, the BioSystems program, and the Defense Technology Area Plans (DTAP) databases and website. Identified FY01 Best Practices for the DoD Technology Area Review and Assessment (TARA) Program. Continued development of the Virtual Technology Exposition (VTE) program (Phase II). Demonstrated VTE to the S&T community and Industry.

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## Exhibit R-2, RDT&E Budget Item Justification APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06 R-1 ITEM NOMENCLATURE Defense Technical Information Services/PE 0605801K

o Expanded Defense Virtual Library (DVL) to include complex digital objects (integrated text, sound and moving images). Investigated potential for archiving/preserving complex objects harvested from the web. Made substantial progress in specifying preservation metadata in Extensible Markup Language (XML). Completed phase 1 of entering DVL data into XML-based metadata registry. Completed initial specifications for access protections at individual object level. Completed the development of Phase I of the Handle System to provide persistent identification of DTIC/DoD internet resources of permanent value.

(2 Otr - 4 Otr; \$.369 Million)

o Enhanced the unclassified Web-Enabled Defense RDT&E Online System (WED), by correcting errors and adding essential functionality. Increased reliability of control mechanisms and further integration with other DTIC unclassified systems. Began effort to move WED into the DTIC standard web infrastructure. Began work on functional requirements for an Electronic Registration System.

(2 Qtr - 4 Qtr; \$.306 Million)

IAC: Provided basic core contract operations for DoD IACs to collect, analyze, synthesize and disseminate worldwide Scientific and Technical Information (STI) in support of DoD's critical technologies and the warfighter. Provided indepth analysis services and created STI products. Responded to technical inquires; prepared state-of-the-art reports, handbooks, and databooks; performed technology assessments; and supported exchange of information among the respective communities of various disciplines within scope for each of the DTIC sponsored, contractor operated IACs.

(1 Qtr - 4 Qtr; \$9.515 Million)

Examples of accomplishments include:

- o Provided substantial science and technological information in support of the Defense Technology Objectives and the Joint Warfighter Science and Technology Plan to develop and transition superior technology which enables affordable and decisive military capabilities.
- o Assimilated modernization techniques and equipment to provide state-of-the-art electronic access and dissemination of IAC products and services.
- o Updated and monitored secure systems.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Informat	ion Services/PE 0605801K

- o Enhanced efforts to totally convert fragile paper media historical archives into electronic media to preserve critical information and provide a totally paperless environment.
- o Promoted IAC awareness through increased program development activities with particular emphasis on emerging technologies to support acquisitions, CINCs and the warfighter.
- o Reviewed, revised, implemented and monitored strategic plan and performance measurements to support continual oversight, assessment, and improvement of DoD IACs.
- o Provided IAC Program access to secure government networks to enable focused critical science and technology support to laboratories, acquisitions, CINCs and the warfighters.
- o Funded ongoing program management office operations. Continued to identify and manage government information collections abandoned by disestablished organizations to be transferred and incorporated into the IAC program. The IAC program provided a return-on-investment (ROI) in excess of 10:1 documented by the community survey results, which stated that a combined cost avoidance of over \$100M was realized. This cost avoidance was due to the leveraged intellectual properties and the exchange of timely information.

(1 Qtr - 4 Qtr; \$.317 Million) \$44.381M Total

#### FY 2002 Plans:

DTIC: Funds ongoing basic operations including input and preservation of information (media conversion where needed, to ensure interoperability and creation of metadata), output of products and services, personnel, maintenance of equipment, postage and support services paid to other government agencies via Inter-service Support Agreements. Implement a baseline Activity Base Costing (ABC) structure which will provide insight into the relationship between Resources and Outputs (Products and Services) by quantifying the work performed (Activities) within DTIC; thereby, facilitating the Most Efficient Organization structure and operational improvements. Integrate internet-based credit card processing system with DTIC's on-line document ordering capability.

(1 Otr - 4 Otr; \$31.593 Million)

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RDT&E, Defense-Wide/06	Defense Technical Informat	cion Services/PE 0605801K

Examples of planned accomplishments include:

- o Continue to provide substantial scientific and technological information in support of the Defense RDT&E effort by leveraging ongoing and completed research findings. Continue to identify and acquire government information collections for dissemination and preservation through the DTIC technical report collection.
- o Assimilate modernization techniques and equipment to provide state-of-the-art electronic access and dissemination of DTIC products and services. Enhance the Electronic Document Management System (EDMS) to include additional output formats and products. Analyze multimedia collection to determine requirements for long-term preservation and recommend policy for maintaining long-term access.
- o Update and monitor secure systems. Enhance efforts to convert the DTIC archive of technical reports to electronic media to preserve critical information and provide a paperless environment.
- o Promote awareness through Distance Learning Courses.
- o Expand the DTIC Knowledge Portal Pilot into a production intranet portal. Initiate development of an extranet portal the Defense Science and Technology (S&T) Knowledge Portal. Integrate DTIC digital products and services including WED, STINET, and IACs into the Defense S&T Knowledge Portal. Integrate DTIC customer service systems into the portal to provide a self service Customer Relationship Management (CRM) capability. Develop a portal infrastructure to support the creation of knowledge communities across the S&T domain.
- o Manage and execute Science & Technology (S&T) Business Process Reengineering (BPR) initiatives for the Deputy Under Secretary of Defense for Science and Technology (DUSD(S&T)). Analyze requirements for collecting laboratories capabilities and develop new data call process to electronically collect and disseminate DoD's FY01 RDT&E In-House Activities Report. Update the Research and Development Descriptive Summaries (RDDS) website with the latest BPR data. Continue enhancements to the DoD S&T InfoWeb, the S&T Collaboration Tool, and the Defense Technology Area Plans (DTAP) databases and websites. Identify FY 02 Best Practices for the DoD Technology Area Review and Assessment (TARA) Program. Continue development, population, and marketing of the Virtual Technology Expo (VTE) program. Conduct special studies to: 1) identify "best practices" to improve the effectiveness and timeliness of the transition of technology from the S&T community to Acquisition program (Project Phases I and II); 2) improve access and use of the S&T BPR sites; and 3) produce an S&T Products at a Glance publication.

(1 Otr - 4 Otr; \$1.512 Million)

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APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Informat	ion Services/PE 0605801K

- o Continue research in use of Defense Virtual Library (DVL) architecture for preservation of objects harvested from the web. Complete specifications for preservation metadata in Extensible Markup Language (XML) and initiate work on Document Type Definition (DTD). Continue development of XML-based metadata registry. Initiate second phase of access protections at individual object level. Complete plan for phased implementation of architecture into DTIC operations. Implement Handle Service with expanded capabilities to facilitate external input and to enable multiple resolution. (2 Qtr 4 Qtr; \$.350 Million)
- o Complete the modernization of the unclassified Web-Enabled Defense RDT&E Online System (WED) infrastructure, complete the WED/STINET merger into Private STINET and begin initial development of the classified Web-Enabled Defense RDT&E Online System (Classified WED) environment. Complete Functional Requirements for the Registration System, begin modifications of the existing relational database for the Registration System and implement Lightweight Directory Access Protocol (LDAP) to facilitate electronic registration.

  (2 Otr 4 Otr; \$.403 Million)

TAC: Provides basic core contract operations for DoD IACs to collect, analyze, synthesize and disseminate, worldwide Scientific and Technical Information (STI) in support of DoD's critical technologies and the warfighter. Provide indepth analysis services and create STI products. Respond to technical inquiries; prepare state-of-the-art reports, handbooks and databooks; perform technology assessments; and support the exchange of information among the respective communities of various disciplines within scope for each of the DTIC sponsored, contractor operated IACs. (1 Otr - 4 Otr; \$9.541 Million)

Examples of planned accomplishments include:

- o Continue to provide substantial science and technological information in support of the Defense Technology Objectives and the Joint Warfighter Science and Technology Plan to develop and transition superior technology which enables an affordable and decisive military capability.
- o Continue efforts to promote IAC awareness through increased interaction with Laboratories, Acquisition Command and the CINCs/warfighters.
- o Support the warfighter, R&D and rapid support staff with push/pull emerging technology that provides services and creates unique products which will help to ensure military technological superiority.

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Exhibit R-2, RDT&E Budget Item Justificati	ion DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
RDT&E, Defense-Wide/06	Defense Technical Information Services/PE 0605801K

- o Enhance efforts to totally convert fragile historical archives into electronic media to preserve critical information and provide a totally paperless environment.
- o Develop Request for Proposal (RFP) packages for four IACs with projected award of two contracts.
- o Update and monitor secure systems.
- o Support the warfighter with push/pull technology that provides services and creates unique products which will help to ensure military technological superiority
- o All new Scientific and Technology Information (STI) acquisitions will collect STI in electronic media, or scan hardcopy STI into electronic media in support of the Total Electronic Migration System (TEMS) effort.
- o Funds ongoing program management office operations. Identify and manage government information collections abandoned by disestablished organizations to be transferred and continue to incorporate into the IAC program.
- (1 Qtr 4 Qtr; \$.339 Million)

\$43.738M Total

#### FY 2003 Plans:

**DTIC:** Funds ongoing basic operations including input and preservation of information (media conversion where needed, to ensure interoperability, creation of metadata), delivery of products and services including web support, personnel, maintenance of equipment, postage and support services paid to other government agencies via Inter-service Support Agreements. Expand Activity Based Costing (ABC) Program, to include budgeting and performance measurements. (1 Otr - 4 Otr; \$31.274 Million)

Examples of planned accomplishments include:

- o Continue to provide substantial scientific and technological information in support of the Defense RDT&E effort by leveraging ongoing and completed research findings. Continue to identify and acquire government information collections for dissemination and preservation through the DTIC technical report collection.
- o Continue to integrate modernization techniques and equipment to provide state-of-the-art electronic access and of DTIC products and services. Continue modernization efforts for Electronic Document Management System (EDMS) to support software/hardware upgrades and additional storage.

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Exhibit R-2, RDT&E Budget Item Justification		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE  Defense Technical Informat	tion Services/PE 0605801K

- o Continue to update and monitor secure systems. Enhance efforts to convert the DTIC archive of technical reports to electronic media to preserve critical information and provide a paperless environment.
- o Continue to enhance the operational Distance Learning courses, with addition of state-of-the-art technology.
- o Expand the Defense Science & Technology (S&T) Knowledge Portal knowledge communities; provide enhanced collaboration tools, and develop enhanced capabilities to capture and disseminate tacit knowledge. Incorporate a software agent functionality into the DTIC S&T Knowledge Portal.
- o Manage and execute the Science & Technology (S&T) Business Process Reengineering (BPR) initiatives for the Deputy Under Secretary of Defense for Science and Technology (DUSD(S&T)). Implement new data call process to electronically collect and disseminate DoD's FY02 RDT&E In-House Activities Report. Update the Research and Development Descriptive Summaries (RDDS) website with the latest BPR data. Continue enhancements to the DoD S&T InfoWeb, the S&T Collaboration Tool, and the Defense Technology Area Plans (DTAP) databases and websites. Identify and implement FY03 Best Practices for the DoD Technology Areas Review and Assessment (TARA). Continue development, population, and marketing of the Virtual Technology Expo (VTE) program. Develop a Best Practices Website and tools with focus on improving technology transition from S&T to Acquisition (Phase III). Implement improved access to S&T BPR Websites. Conduct special studies.
- (1 Otr 4 Otr; \$2.326M)
- o Determine suitability of Defense Virtual Library (DVL) architecture for preservation of web objects and evaluate preservation metadata selected in 2002, complete third phase of access protections at individual objects level. Complete Phase 1 of implementation of DVL architecture into DTIC. Expand Handle Service capabilities.

  (2 Otr 4 Otr; \$.510 Million)
- o Complete development and testing of the classified Web-Enabled Defense RDT&E Online System (WED) using SIPRNET access and put into production. Complete development of new registration system and full-scale implementation.

  (1 Qtr 4 Qtr; \$.635 Million)

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Exhibit R-2, RDT&E Budget Item Justification		DATE: February 2002
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IAC: Provides basic core contract operations for DoD IACs to collect, analyze, synthesize and disseminate, worldwide Scientific and Technical Information (STI) in support of DoD's critical technologies and the warfighter. Provide indepth analysis services and create STI products. Respond to technical inquiries; prepare state-of-the-art reports, handbooks and databooks; perform technology assessments; and support the exchange of information among the respective communities of various disciplines within scope for each of the DTIC sponsored, contractor operated IACs. (1 Qtr - 4 Qtr; \$9.769 Million)

Examples of planned accomplishments include:

- o Continue to provide substantial science and technological information in support of the Defense Technology Objectives and the Joint Warfighter Science and Technology Plan to develop and transition superior technology which enables an affordable and decisive military capability.
- o Support the warfighter, R&D and rapid support staff with push/pull emerging technology that provides services and creates unique products which will help to ensure military technological superiority.
- o Continue efforts to promote IAC awareness through increased interaction with laboratories, Acquisition Commands and the CINCs/warfighters.
- o Continue to enhance efforts to totally convert fragile historical archives into electronic media to preserve critical information and provide a totally paperless environment.
- o Update and monitor secure systems.
- o Continue STI acquisition in electronic media, scan hardcopy STI into electronic media in support of the Total Electronic Migration System (TEMS) effort.
- o Develop Request for Proposal (RFP) packages for three IACs.
- o Conduct Source Selection Evaluation Boards (SSEBs) and award contracts for two IACs.
- o Funds ongoing program management office operations. Identify and manage government information collections abandoned by disestablished organizations to be transferred and incorporated into the IAC program.

(1 Qtr - 4 Qtr; \$.735 Million)

\$45.249M Total

# Exhibit R-2, RDT&E Budget Item Justification APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06 DATE: February 2002 R-1 ITEM NOMENCLATURE Defense Technical Information Services/PE 0605801K

## B. Program Change Summary:

<u>-</u>	Cost in Millions		
	FY 01	FY 02	FY 03
Previous President's Budget (FY 2002)	44.187	44.228	43.859
Appropriated Value	45.350	44.228	
Adjustment to Appropriated Value	969	490	
Adjustment to Budget Year since FY 2002 President's Budget			1.390
Current Budget Submission/President's Budget (FY 2003)	44.381	43.738	45.249

## Change Summary Explanation:

- FY 2001 changes are due to below threshold reprogrammings.
- FY 2002 changes are due to undistributed congressional adjustments to Defense-Wide RDT&E appropriation.
- FY 2003 changes are due to revised fiscal guidance.
- C. Other Program Funding Summary: No related efforts.